

WHAT IS CLAIMED IS:

1. An electric energy storage device, the device inserted in a housing charged with an electrolyte solution, the device including:

5 at least one electrode body formed by rolling up a stacked layer consisting of an anode electrode, a first insulating film, a cathode electrode and a second insulating film, wherein a first protrusion of the anode electrode protrudes from one end of the electrode body and a second protrusion of the cathode electrode protrudes from the other end of the electrode body and wherein the first insulating film isolates the anode electrode from the cathode electrode except the first and second protrusions;

10 an anode terminal connected to the first protrusion of the anode electrode wherein a first contact-extending part is formed at a bottom of the anode terminal; and
a cathode terminal connected to the second protrusion of the cathode electrode wherein a second contact-extending part is formed at a bottom of the cathode terminal.

15 2. The device of claim 1, wherein the second insulating film, the cathode electrode, the first insulating film and the anode electrode are stacked in order and wherein portions of the anode and cathode electrodes are stacked not to be overlapped with.

20 3. The device of claim 1, wherein the anode and cathode terminals are plate type.

4. The device of claim 1, wherein the first and second contact-extending parts are formed with a plurality of uneven parts contacted with the electrode body.

5. The device of claim 1, wherein the anode and cathode terminals are plates sufficient to cover surfaces of the first and second protrusions of the anode and cathode electrodes, respectively.

6. The device of claim 1, the device further comprising a metal layer formed on surfaces of the first and second protrusions.

7. The device of claim 6, wherein the metal layer is formed by plasma spray or arc spray.

8. The device of claim 1, wherein the anode and cathode terminals are made of the same materials of the anode and cathode electrodes respectively.

9. The device of claim 1, wherein a pressure adjusting means is inserted between the housing and the anode and cathode terminals so as to maintain a predetermined constant pressure between the electrode body and the anode and cathode terminals.

10. The device of claim 9, wherein the pressure-adjusting means is a rubber packing.

11. The device of claim 1, wherein inlets for injecting the electrolyte are formed at each center of the anode and cathode terminals and wherein a plurality of grooves crossing each other are formed at the bottom surfaces of the anode and cathode terminals.

12. An electric energy storage device, the device inserted in a housing charged with an electrolyte solution, the device including:

at least a first and a second electrode bodies formed by rolling up a first stacked layer consisting

of a first anode electrode/first insulating film/first cathode electrode/second insulating film and a second stacked layer consisting of a second anode electrode/third insulating film/second cathode electrode/fourth insulating film, respectively,

wherein a first protrusion of the anode electrode protrudes from one end of the first electrode body and a second protrusion of the first cathode electrode protrudes from the other end of the electrode body,

wherein a third protrusion of the second anode electrode protrudes from one end of the second electrode body and a fourth protrusion of the second cathode electrode protrudes from the other end of the second electrode body,

wherein the first and third insulating films isolate the first and second anode electrodes from the first and second cathode electrodes, respectively, except the first to fourth protrusions, and wherein the first and second electrode bodies are inserted in the housing in a line such that the second protrusion of the first electrode body is contacted with the third protrusion of the second electrode body;

an anode terminal connected to the first protrusion of the first anode electrode wherein a first contact-extending part is formed at a bottom of the anode terminal; and a cathode terminal connected to the fourth protrusion of the second cathode electrode wherein a second contact-extending part is formed at a bottom of the cathode terminal.

13. The device of claim 12, the device further comprising a contact terminal inserted between the second protrusion of the first cathode electrode of the first electrode body and the third protrusion off the second anode electrode of the second electrode body.

14. The device of claim 13, wherein at least an anti-explosive valve is formed at a predetermined

portion of the contact terminal.

15. The device of claim 12, wherein a third and a fourth contact-extending part are formed at a top and a bottom of the contact terminal contacted with the second and third protrusions,
5 respectively.

16. The device of claim 12, wherein the second insulating film, the first cathode electrode, the first insulating film and the first anode electrode are stacked in order, wherein the fourth insulating film, second cathode electrode, the third insulating film, and the second anode
10 electrode are stacked in order, and wherein end portions of the first and second anode and cathode electrodes are stacked not to be overlapped with.

17. The device of claim 12, wherein the first and second anode and cathode terminals are plate type.

18. The device of claim 12, wherein the first and second contact-extending parts are formed with a plurality of uneven parts contacted with the electrode body.

19. The device of claim 12, wherein the anode and cathode terminals are plates sufficient to
20 cover the first protrusion of the first anode electrode and the fourth protrusion of the second cathode electrode, respectively.

20. The device of claim 12, the device further comprising a metal layer formed on surfaces of the first to fourth protrusions.

21. The device of claim 12, wherein a pressure adjusting means is inserted between the housing and the anode and cathode terminals so as to maintain a predetermined constant pressure between the first and second electrode bodies and the anode and cathode terminals.

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22. The device of claim 12, wherein inlets for injecting the electrolyte are formed at each center of the anode and cathode terminals and wherein a plurality of grooves crossing each other are formed at the bottom surfaces of the anode and cathode terminals.